

# Honeywell

## Wireless Indoor/Outdoor Thermometer with US Atomic Clock

(TE218ELW)  
USER MANUAL

### Introduction

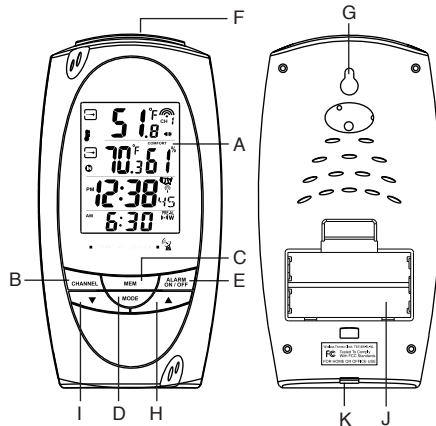
Thank you for selecting the Honeywell Wireless Indoor/Outdoor Thermometer with US Atomic Clock.

This device includes precise time keeping, alarms and indoor/outdoor temperature monitoring features that you can enjoy from the comfort of your home.

In this package you will find:

- Main unit (receiver)
- Remote sensor (transmitter) TS13

Please keep this manual handy as you use your new item. It contains practical step-by-step instructions, as well as technical specifications and precautions you should know.



### A FOUR-LINE DISPLAY

Allows easy reading of the indoor or outdoor temperature and calendar clock

### B CHANNEL SELECTOR

Selects different remote sensor readings

### C MEMORY [MEM] BUTTON

Recalls maximum or minimum temperature

### D MODE BUTTON

Changes display modes and confirms setting

### E ALARM ON/OFF BUTTON

Selects an alarm time and sets an alarm status

### F SNOOZE/LIGHT BUTTON

Activates the snooze and LCD backlight

### G WALL-MOUNT RECESSED HOLE

Keeps the main unit on a wall

### H UP ( ▲ ) BUTTON

Increases the setting

### I DOWN ( ▼ ) BUTTON

Decreases the setting

### J BATTERY COMPARTMENTS

Accommodates two UM-3 or "AA" size 1.5V alkaline batteries

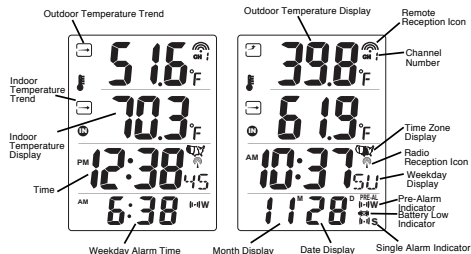
### K REMOVABLE TABLE STAND

Holds unit in upright position on a flat surface

## FEATURES

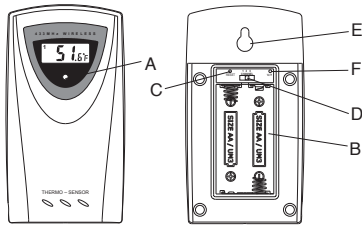
### MAIN UNIT

- \* Precise Atomic time keeping with daily clock updates
- \* Time display with hours, minutes and seconds
- \* Calendar display with month and date
- \* US time zone settings (Pacific, Mountain, Central & Eastern)
- \* Radio - controlled signal reception indicator
- \* User-Selectable 12/24 hour time format
- \* Weekday displayed in 5 different languages – English, Spanish, French, German and Italian
- \* User-Selectable temperature display in °C or °F
- \* Indoor temperature display
- \* Remote temperature monitored from up to 3 locations via 433 MHz frequency band (one remote sensor is included)
- \* Wall mount or desktop option
- \* Dual crescendo alarm with snooze
- \* Programmable low-temperature pre-alarm warns about icy or inclement weather conditions prior to regular alarm time
- \* LCD with blue backlight



## REMOTE TEMPERATURE SENSOR

- \* Remote temperature transmission to the main unit via 433MHz signal.
- \* Case can be wall mounted using built-in hanger
- \* 100 feet transmission range without interference
- \* LCD display of measured temperature
- \* Temperature display unit (°C or °F) selection
- \* Transmission channel selection



### A LED INDICATOR

Flashes once when the remote sensor transmits a reading  
Flashes twice when battery power is low

### B BATTERY COMPARTMENT

Accommodates two AA-size batteries

### C RESET

Resets all previous settings

### D CHANNEL SELECTOR

Selects the desired channel before installing batteries

### E WALL-MOUNT RECESSED HOLE

Keeps remote sensor on the wall.

### F °C/°F SWITCH

Selects the temperature display in Fahrenheit or Celsius

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## BEFORE YOU BEGIN

1. We recommend using alkaline batteries for main unit and remote sensor.
2. Avoid using rechargeable batteries.
3. Insert batteries before first use, matching the polarity as shown in the battery compartment.
4. Always insert batteries in the remote sensor first.
5. Press **RESET** after each battery change, using a paper clip or similar tool.
6. During the initial setup, place the main unit as close as possible to the remote sensor.
7. After reception is established, position the remote sensor and main unit within the effective transmission range of 100 feet.

NOTE: 1. Avoid setting the time and date on the main unit before the remote temperature is displayed.

2. The effective operating range may be influenced by the surrounding building materials and how the receiver and transmitter are positioned.
3. Place the remote sensor so that it faces the main unit (receiver), minimizing obstructions such as doors, walls and furniture.
4. Though the remote sensors are weather resistant, they should be placed outdoors away from direct sunlight, rain or snow.

## BATTERY INSTALLATION TEMPERATURE SENSOR

NOTE: Install the batteries; select the channel and temperature unit (°C/°F) before you mount the remote sensor.

1. Remove the screws in the battery compartment with a small Phillips screwdriver.
2. Select the channel. The switch is located in the battery compartment. Channel 1 is typically selected if only 1 remote is being used.
3. If you are using more than one sensor, select a different channel for each sensor.
4. Install 2 "AA" size batteries (not included) matching to the polarities shown in the battery compartment.
5. Replace the battery compartment door and secure the screws.
6. Secure the remote sensor in the desired location.

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## **BATTERY INSTALLATION**

### **MAIN UNIT**

The Wireless Indoor/Outdoor Thermometer main unit uses 2 "AA" batteries (not included). When the LCD becomes dim or the respective low battery indicator shows up on the indoor or remote temperature display, the battery replacement is required. To install or replace the batteries, please follow these steps:

1. Remove the battery compartment door on the back of the main unit.
2. Insert 2 "AA" size batteries (not included) matching the polarities shown.
3. Replace the battery compartment door.

### **HOW TO USE THE TABLE STAND OR WALL MOUNTING**

The main unit has a removable table stand, that supports it on a flat surface. The unit can also be mounted on the wall using the recessed screw hole. The stand must be removed prior to mounting. The remote sensor can be similarly mounted or placed on a flat surface.

### **GETTING STARTED**

1. After the batteries are installed, remote sensor will transmit the temperature readings at about 45 second intervals.
2. The main unit may take up 2 minutes to receive the initial readings.
3. Upon successful reception, the remote temperature will be displayed under the top line of the main unit LCD display, and the indoor temperature will be displayed below the remote one.
4. The main unit will automatically update readings at 45-second intervals.
5. After the main unit finishes searching for the temperature signal from the remote unit(s), the WWVB time signal receiver will start searching for the atomic time signal. It takes about 5-8 minutes.

Always place main unit by the window for better reception.

If in 8 minutes the WWVB time signal has not been received, use the MODE button to set the time manually (see "setting the time and date manually" section.)

The clock will continue to search for the WWVB time signal daily from 1:00am to 4:30am. If reception is successful, the time and date will be updated automatically.

6. You may activate the WWVB receiver at any time by pressing and holding the ↑ button for 3 seconds in the Hour/Minute/Second display.

### **FUNCTION KEYS**

Your Wireless Forecaster has 6 easy - to - use function keys that control its operation:

#### **Use the MODE button:**

- \* To set the time manually
- \* To view the calendar

#### **Use the ↑ button:**

- \* To increase the hour, minute, year, month and date
- \* To select 12/24 hour format
- \* To select temperature display unit (°C or °F)
- \* To select the weekday language
- \* To select the time zone
- \* To activate reception of the WWVB signal

#### **Use the ↓ button:**

- \* To decrease the hour, minute, year, month and date
- \* To select 12/24 hour format
- \* To select temperature display unit (°C or °F)
- \* To select the weekday language
- \* To search for the remote sensor signal

#### **Use the CHANNEL button:**

- \* To view the reading of different remote sensor(s)

#### **Use the MEM button:**

- \* To view the maximum or the minimum indoor or remote temperature
- \* To clear the previous temperature records

#### Use the ALARM ON/OFF button:

- \* To view the weekday alarm, single alarm or the pre-alarm.
- \* To set the alarm times.
- \* To turn off any alarm.

#### CALENDAR CLOCK DISPLAY MODES

Both an alarm time and the calendar share the same section of the LCD display. The next line displays the current time with seconds and the day of the week. The calendar is displayed in the month and day format. If the alarm time is displayed, press **MODE** to display the calendar in month-day format. Each press on the **MODE** button will change the display between the time with the seconds and the time with the day of the week.

#### DATE AND TIME SETTING

1. Press **MODE** button to change to the Hour/ Minute/ Weekday display. Select the Time Zone by pressing and holding the **↑** button for 3 seconds. Keep holding until the desired time zone (Pacific, Mountain, Central or Eastern) is displayed. A dark section on the map indicates the time zone selected.
2. Press and hold **MODE** for 3 seconds: The year digit will flash. Press **↑** or **↓** to select the year.
3. Press **MODE** again: The month digit will flash. Press **↑** or **↓** to select the month.
4. Press **MODE** again: The date digit will flash. Press **↑** or **↓** to select the date.
5. Press **MODE** again: The "12 Hr" digit will flash to prompt for 12 or 24 hour display format. Press **↑** or **↓** to select 12 or 24 Hr.
6. Press **MODE** again: The hour digit will flash. Press **↑** or **↓** to select the hour.
7. Press **MODE** again: The minute digit will flash. Press **↑** or **↓** to select the minute.

#### LANGUAGE SETTING

The weekday may be displayed in one of five languages: English, Spanish, French, German, or Italian

1. After the minute is set, press **MODE**, and the weekday display will indicate the current preset language. "EN" for English.
2. Press **↑** or **↓** to set the desired language for the weekday display. The selection sequence is "EN" for English, "SP" for Spanish, "FR" for French, "GE" for German, and "IT" for Italian.

#### °C or °F TEMPERATURE DISPLAY SELECTION

1. When the language of weekday is set, press **MODE**.
2. "°F" will flash prompting the Fahrenheit display.
3. Press **↑** or **↓** to select desired temperature display: "°F" for Fahrenheit or "°C" for Celsius.

#### EXIT THE MANUAL SETTING MODES

- \* When the temperature display is set, press **MODE** to return to the default hours, minutes and seconds display.
- \* If no key is pressed for 30 seconds, the unit will return to default time display.

#### VIEWING THE ALARM TIME SETTINGS

There are 3 different alarms available: Weekday alarm, Single alarm and the Pre-alarm.

\* Weekday Alarm

The alarm will sound and alarm icon "Ⓦ" will flash at the set time, Monday through Friday.

\* Single Alarm

The alarm will sound and the alarm icon "Ⓢ" will flash at the set time. Once it is finished, it will be disabled automatically. This is useful for weekends, holidays or any day when you wish to wake at a time other than your normal weekday alarm time. There is no need to reset your regular alarm time. This alarm can be bypassed during the set up if you choose not to use it.

#### \* Pre-Alarm

If the remote temperature (channel 1) is 32°F or below, the pre-alarm feature will be activated. The pre-alarm time interval can be set for 15, 30, 45, 60, 75 or 90 minutes before the weekday or single alarm time.

This alarm will only sound if either the weekday or single alarms are armed. It may warn you about the lower temperature weather conditions and wake you up earlier in case of a potential ice or snow. This alarm can be bypassed during the set up if you choose not to use it.

If the calendar is displayed, pressing **ALARM ON/OFF** will display the weekday alarm. Each press on **ALARM ON/OFF** button will display the next available alarm in the sequence of Weekday alarm, Single alarm and Pre-alarm. Press **MODE** to return to the calendar display.

#### WEEKDAY ALARM SETTING

1. Press **↑** to view the previous weekday alarm time and arm the alarm.
2. Press **↓** to disarm the weekday alarm and have the display read "OFF".
3. When the weekday alarm time is displayed, press and hold **ALARM ON/OFF** for 3 seconds;
4. The alarm hour digit will flash, then press **↑** or **↓** to adjust the desired hour.
5. Press **ALARM ON/OFF** again, the alarm minute digit will flash, then press **↑** or **↓** to adjust the desired minute.
6. Press **ALARM ON/OFF** again and the weekday alarm is set with the icon "W" on the display.

#### SINGLE ALARM SETTING

Press **ALARM ON/OFF** to select the single alarm. If the alarm is disarmed, the alarm time will be displayed as "OFF". If you choose not to set the **SINGLE ALARM** press **ALARM ON/OFF** again to advance to the **PRE-ALARM** setting procedure.

1. Press **↑** to view the previous single alarm time and arm the alarm.
2. Press **↓** to disarm the single alarm and "OFF" will be displayed.
3. When the single alarm time is displayed, press and hold **ALARM ON/OFF** for 3 seconds;
4. The alarm hour digit will flash, then press **↑** or **↓** to adjust the desired hour.
5. Press **ALARM ON/OFF** again, the alarm minute digit will flash, then press **↑** or **↓** to adjust the desired minute.
6. Press **ALARM ON/OFF** again and the single alarm is set with the icon "S" on the display.

#### PRE-ALARM SETTING

Press **ALARM ON/OFF** to select the pre-alarm time. If the alarm is disarmed, the alarm time will be displayed as "OFF". The pre-alarm can be set only if the weekday alarm or the single alarm is set. If you choose not to set the **PRE-ALARM** press **ALARM ON/OFF** again to exit the setting procedure.

1. Press **↑** to view the previous pre-alarm time and arm the alarm.
2. Press **↓** to disarm the pre-alarm time and have the display read "OFF".
3. When the pre-alarm time is displayed, press and hold **ALARM ON/OFF** for 3 seconds;
4. The minute digit will flash, then press **↑** or **↓** to adjust the desired pre-alarm period in the sequence of 15, 30, 45, 60, 75, 90 minutes.
5. Press **ALARM ON/OFF** again and the pre-alarm is set with the icon "PRE-AL" on the display.

#### USING THE ALARM AND SNOOZE

When the alarm sounds, press the **LIGHT/SNOOZE** key to temporarily stop the alarm. After depressing **LIGHT/SNOOZE**, the alarm sound will resume in 5 minutes. If the alarm is not disabled after that, it will sound for 4 more minutes and then will stop by itself. Press **ALARM ON/OFF** to disable any alarm.

### **DISABLING ATOMIC TIME SIGNAL RECEPTION**

The main unit can be set manually to disable the daily reception of the WWVB time signal. Press and hold the ↑ and ↓ buttons at the same time for 3 seconds and the radio reception icon will disappear. To enable WWVB receiver, press and hold the ↑ and ↓ buttons at the same time for 3 seconds again. The radio reception icon will flash. The main unit will start to search for the WWVB time signal immediately.

### **LOST COMMUNICATION**

If the main unit display for the remote sensor goes blank, press and hold ↓ for 3 seconds to begin a new signal search. If the signal still isn't received, please make sure that:

1. The remote sensor is in its proper location.
2. The distance between the main and remote units is not over 100 feet.
3. The path between units is clear of obstacles. Shorten the distance between units if necessary.
4. Fresh batteries are installed correctly in both remote sensor and main unit.

If it does not work, please perform the following steps:

1. Bring the main unit and remote sensor close together.
2. Remove 4 small screws from the back of the remote sensor and open the battery compartment.
3. Remove the batteries from the battery compartment and reinstall them in the same manner. Remote sensor LED indicator will flash showing transmission of the signal.
4. Remove the batteries from the main unit and reinstall them in the same manner.

5. On the main unit select the same channel number that set on the remote sensor. Outdoor temperature on the display will show that transmission is being received successfully.

**Note:** When the temperature falls below the freezing point the batteries in the remote sensor(s) will freeze lowering their voltage output and effective range. During prolonged periods of extreme cold it is advisable to bring the remote sensor indoors, if alkaline batteries are being used. We recommend to use lithium ion batteries at temperatures below 32°F.

### **TRANSMISSION COLLISION**

Signals from other household devices, such as door bells, home security systems and entry controls, may interfere with this product and cause temporary reception failure. This is normal and does not affect the general performance of the product. The transmission and reception of the temperature readings will resume once the interference ends.

### **CHECKING REMOTE AND INDOOR TEMPERATURE**

The indoor temperature is shown on the second line of the main unit display. The remote temperature is shown on the top line of the display. The wave icon near the remote temperature reading indicates that there is a good reception from the remote sensor. If there is no signals received from the remote unit for more than 2 minutes, a dashes “-.-” will be displayed. Press and hold ↓ button for 2 seconds to activate an immediate signal search.

### TEMPERATURE TREND

The trend indicator shows the trend of temperatures collected at a particular remote sight. There are three trends will be shown: Rising, Steady, and Falling.

Arrow Indicator			
Temperature	Rising	Steady	Falling

### MAXIMUM AND MINIMUM TEMPERATURE




The maximum and minimum records of the indoor and remote temperature will be automatically stored in the memory.

The main unit will display the minimum, maximum and the current reading upon each press of the **MEM** button. If the **MEM** button is not pressed, the unit will return to the current temperature display in 15 seconds.

To clear the memory, press and hold **MEM** for 3 seconds. The maximum and minimum readings will be erased.

### READING THE KINETIC WAVE DISPLAY

The kinetic wave display shows the signal receiving status of the main unit. There are three possible forms:

The Unit is in searching mode	
Temperature readings are securely registered	
No signals.	

### WWVB RADIO CONTROLLED TIME

The NIST (National Institute of Standards and Technology) radio station is located in Ft. Collins, Colorado.

It transmits the exact time signal continuously throughout the continental United States at 60KHz. Wireless Indoor/ Outdoor Thermometer can receive this WWVB signal through its internal antenna from the distance up to 2,000 miles away. Due to the nature of the Earth's ionosphere, reception can be limited during the daytime. The radio control clock will search for a signal every night when reception is best. The WWVB radio station receives its signal from the NIST Atomic clock in Boulder, Colorado.

The WWVB tower icon on the main unit's display will flash indicating radio signal reception from the WWVB radio station. When the time signal is received, the WWVB tower icon turns on and the time of the selected time zone will be displayed. If only the part of the WWVB tower icon turns on or the WWVB tower does not appear at all and the time is not set, please consider the following:

- \* Make sure the main unit is positioned at 8 feet distance from any interference source such as a TV, computer monitors, microwave ovens, etc
- \* Within concrete rooms (basements, superstructures, office buildings), the received signal will be weakened, and the main unit should be placed close to a window.
- \* The successful reception of the atomic time signal depends on the positioning and location of the main unit. Always place the main unit by the window for better reception.
- \* During the night time, the atmospheric disturbances are usually less severe and reception may be improved.  
A single daily reception is sufficient enough to keep the accuracy reading within 1 second.

**Note:** In case the radio-controlled clock is not able to detect the WWVB signal (due to disturbances, transmitting distance, etc), the time can be manually set and will be maintained accurately until a signal is available.



## CARE OF YOUR WIRELESS INDOOR/OUTDOOR THERMOMETER WITH US ATOMIC CLOCK

This product is engineered to give you years of satisfactory service if you handle it carefully. Here are a few precautions:

1. Do not immerse the units in water.
2. Do not use any corrosive cleanser or chemical solution on the units. They may scratch the plastic parts and corrode the electronic circuit.
3. Do not subject the units to excessive force, shock, dust, temperature or humidity, which may result in malfunction, shorter electronic life span, damaged batteries and distorted parts.
4. Do not tamper with the units internal components. Doing so will invalidate the warranty on the units and may cause unnecessary damage. The units contain no user-serviceable parts.
5. Only use fresh batteries as specified in the user's manual. Do not mix new and old batteries as the old ones may leak. Always replace both batteries at the same time.
6. Always read the user's manual thoroughly before operating the units.
7. Replace the batteries promptly when necessary (display becomes dim) or store the batteries when not in use.
8. A soft cloth or paper towel may be used to clean your units.
9. Keep the units clean and dry to avoid any problems.

## SPECIFICATIONS

### *Temperature Measurement*

#### *Main unit*

Indoor Temperature

Proposed operating range : -5°C to +50°C /  
23°F to 122°F

Temperature resolution

: 0.1°C/ 0.2°F

#### *Remote Sensor*

Proposed operating range

: -20°C to + 70°C /

-4°F to 158°F

Proposed operating range

: -38°F to + 158°F /

with lithium batteries

(-38.8°C to 70°C)

Temperature resolution

: 0.1°C/ 0.2°F

RF Transmission Frequency

: 433 MHz

Maximum number of Remote sensors

: 3

RF Transmission Range

: Maximum 100 feet

Temperature sampling cycle

: approximately  
45 seconds

### *Calendar and Clock*

12/24 hour display in hh : mm format

Date Format: Month – Day format

Day of week: User- selectable in 5 languages

(English, Spanish, French, German, Italian)

Dual 4-minute crescendo alarm with snooze

Pre-alarm for ice alert with programmable time intervals

Blue Backlight

#### *Power*

Main unit : 2 x UM-3/ AA (1.5V) batteries

- alkaline are suggested (not included)

Remote Sensor : 2 x UM-3/ AA (1.5V) batteries

- alkaline are suggested (not included)

### **FCC STATEMENT**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

**Warning:** Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

### **DECLARATION OF CONFORMITY**

We

Name: Hideki Electronics, Inc.  
Address: 7865 SW Mohawk, Tualatin, OR 97062  
Telephone No.: 1-503-612-8395

declare that the product

Produce No.: TE218ELW  
Product Name: Wireless Indoor/ Outdoor Thermometer with Atomic Clock  
Manufacturer: Hideki Electronics Ltd.  
Address: Unit 2304-06, 23/F Riley House, 88 Lei Muk Road, Kwai Chung, New Territories, Hong Kong

is in conformity with Part 15 of the FCC Rules.  
Operation is subject to the following two conditions:  
1. This device may not cause harmful interference.  
2. This device must accept any interference received, including interference that may cause undesired operation.

The information above is not to be used as contact for support or sales. Please call our customer service hotline (refer to the Standard Warranty Information) for all inquiries instead.

### **STANDARD WARRANTY INFORMATION**

This product is warranted from manufacturing defects for one year from date of retail purchase. It does not cover damages or wear resulting from accident, misuse, abuse, commercial use, or unauthorized adjustment and repair.

Note that online product registration is required to ensure valid warranty protection.

To register your product, go to our Company website at: [www.hidekielectronics.us](http://www.hidekielectronics.us). Click Online Product Registration under the Customer Service menu. Should you require assistance with this product and its operation, please contact our Customer Service Hotline 1(866) 443 3543

Please direct all returns to the place of the original purchase. Should this not be possible, contact Customer Service Hotline for assistance or to obtain a Return Merchandise Authorization (RMA). Returns without a return authorization will be refused. Please retain your original receipt as you may be asked to provide a copy for proof of purchase.

Hideki Electronics, Inc. reserves the right to repair or replace the product at our option.

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